Claims:

1. Method of drying gas comprising contacting said gas with an aqueous solution of potassium formate to absorb moisture therefrom, and regenerating said solution in a cavitation regenerator.

2. Method of claim 1 wherein said solution contains from 40% to 80% potassium formate both initially and after said regenerating, and wherein said solution, after regenerating, is used again to dry gas.

3. Method of claim 2 wherein said solution contains from 70% to 75% potassium formate.

4. Method of claim 1 wherein said regenerating step is conducted after said solution has absorbed water to an extent of at least 35% by weight based on the original solution.

5. Method of claim 1 wherein said gas is natural gas.

6. Method of claim 5 wherein said natural gas is contacted with said aqueous solution of potassium formate in an absorption tower.

7. Method of claim 1 wherein said gas is air.

8. Method of drying natural gas comprising contacting said natural gas with a first solution comprising at least 40% weight percent potassium formate to absorb moisture therefrom, contacting said natural gas with a second solution of at least 55% weight percent potassium formate to absorb moisture therefrom, regenerating said first solution in a cavitation regenerator, and regenerating said second solution in a cavitation regenerator.

9. Method of claim 8 wherein said second solution contacts said natural gas after it has been contacted with said first solution.

10. Method of claim 9 including returning the regenerated first solution to contact said natural gas.

11. Method of claim 10 including returning the regenerated second solution to contact said natural gas after it has contacted said regenerated first solution.

12. Method of claim 8 wherein said first solution comprises 40-65% potassium formate by weight.

13. Method of claim 8 wherein said second solution comprises 55-80% potassium formate by weight.

14. Method of concentrating a water absorbent solution which has been diluted by absorbing water from a gas comprising passing said solution through a cavitation regenerator to remove at least 10% of the water therein.

15. Method of claim 14 wherein said water absorbent solution comprises a glycol. see ~ 631

16. Method of claim 14 wherein said water absorbent solution comprises potassium formate.

17. Method of drying gas comprising (a) contacting said gas in a first gas contactor with a solution comprising potassium formate to absorb water from said gas into said solution and form a semi-dry gas and a first dilute solution comprising potassium formate, (b) concentrating said first dilute solution comprising potassium formate to form a first regenerated potassium formate solution, (c) contacting said semi-dry gas from said first gas contactor with said first regenerated potassium formate solution to form a dry gas and a second dilute solution comprising potassium formate, (d) concentrating said second dilute solution comprising potassium formate to form a second regenerated solution comprising potassium formate, and (e) passing said second regenerated potassium formate solution to said first gas contactor.

18. Method of claim 17 which is continuous and wherein said gas is natural gas.

19. Method of claim 17 wherein at least one of steps (b) and (d) is performed in a cavitation regenerator.

20. Method of claim 17 wherein at least one of steps (a) and (c) is performed in an absorption tower.